--18. The stream switching system of claim 1, wherein said tubing at least in part is a flow restrictor.--

--19. The stream switching system of claim 18, wherein there are more input ports than output ports.--

--20. The stream switching system of claim 1, wherein there are more input ports than output ports.--

--21. The stream switching system of claim 1, further comprising at least one sample shut off switch connected to a downstream end of said tubing.--

--22. The stream switching system of claim 18, further comprising at least one sample shut off switch connected to a downstream end of said tubing.--

--23. The stream switching system of claim 21, wherein said sample shut off switch includes a bleed port.--

--24. The stream switching system of claim 1, wherein each of input ports and output ports are individually actuatable.--

--25. A stream switching system, comprising:

a housing with entrance holes and exit holes;

means for selecting which of a plurality of gas samples enter said housing;

means for heating said gas samples after said gas samples have entered said housing.

--26. A stream switching system, comprising:

a housing forming an interior flow path for gas samples, said flow path connecting to the exterior of said housing via a first number of input ports and a second number of output ports, wherein said number of input ports is greater than said number of output ports; and

piping connected to at least one of said output ports, said piping heating said gas samples to about a predetermined temperature.--

--27. The stream switching system of claim 26, wherein said housing further forms a sample shut off channel with an external bleed port, and further wherein said piping is upstream of said sample shut off channel.--